DRUG TRENDS

Hepatitis C Virus Cascade of Care Among People Who Inject Drugs:

A cross-sectional study of characteristics associated with accessing testing, treatment, and completion in a universal healthcare system

D. Gibbs, S. Larney, J. Grebely, K. Butler, R. Sutherland, L. Degenhardt, G. Kelly, A. Karlsson, J. Uporova, R. Bruno, C. Salom, P. Dietze, S. Lenton, M. Farrell, & A. Peacock.

Funded by the Australian Government under the Drug and Alcohol Program

Burnet Institute Medical Research. Practical Action. | UTAS | Northern Territory Government | The University Of Queensland | NDRI national drug research institute | Curtin University | UNSW AUSTRALIA | NDARC National Drug & Alcohol Research Centre

Acknowledgements and Conflicts of interest

The Illicit Drug Reporting System and the National Drug and Alcohol Research Centre are supported by funding by the Australian Government Department of Health under the Drug and Alcohol Program.

SL has received untied educational grants from Indivior.

AP has received untied educational grants from Seqirus and Mundipharma.

RB has received untied educational grants from Mundipharma and Indivior.

No pharmaceutical grants were received for this study.

DRUG TRENDS

PWID at high risk of HCV infection

- Direct acting antiviral treatment can reduce HCV infection and mortality
- Large scale uptake of treatment needed
- Access to HCV testing, treatment, and retention in treatment among PWID low
- Given high risk of infection, targeting PWID is crucial to achieve necessary reductions
- To achieve this we need to know who is and who isn't receiving testing and treatment.

Cascade of care improves understanding of continuum of care

- Adapted from framework used to monitor HIV care

- Improved understanding of HCV care, from diagnosis, to linkage to care, and completion of treatment

DRUG TRENDS

Aims

1. Establish the cascade of HCV care, from testing to completion of treatment, among a sample of PWID in Australia
2. Identify the sociodemographic, drug use, and clinical profile of those engaged at each stage of the cascade of care

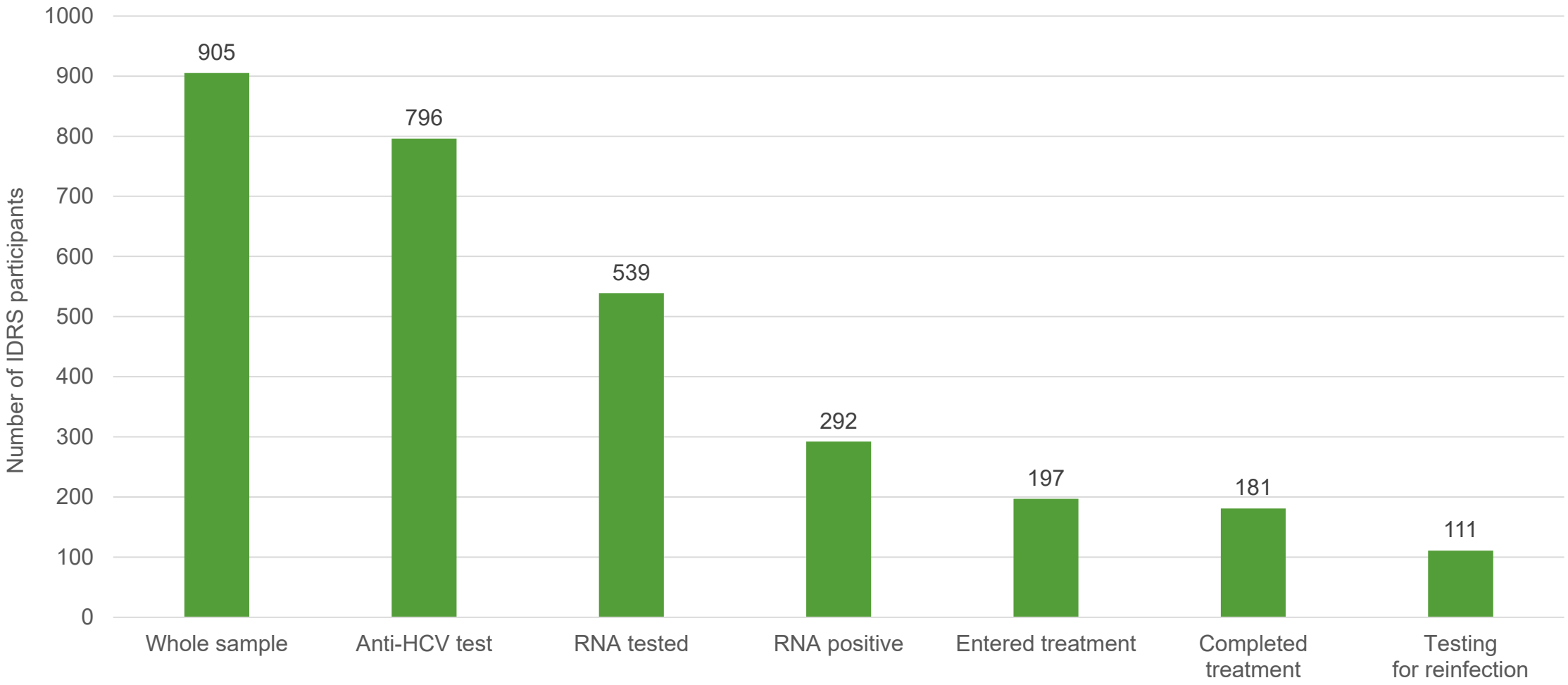
DRUG TRENDS

Design: cross-sectional study of people who inject drugs across Australia

- Recruited from NSPs in capital cities in each state
- Injected drugs at least monthly in the past 6 months
- Structured interview on drug use and related issues
- 905 participants; median age 43; 66% male
- Multivariable regression was performed on four models:
  - Antibody testing
  - RNA testing
  - Treatment uptake
  - Testing for re-infection

DRUG TRENDS

HCV Cascade of Care



DRUG TRENDS

Antibody testing

- With 93% of the sample receiving antibody testing in their lifetime;

- Unadjusted associations:

  - ↑ Current OST (OR 2.36)
  - ↑ History of incarceration (OR 1.79)
  - ↑ Attending a GP (OR 1.74)
  - ↓ Crystal methamphetamine drug of choice (OR 0.45)

- No factors significantly associated with engagement with testing.

RNA testing

- 70% of those who had antibody test

- Unadjusted associations
  - ↑ Male (OR 1.44)
  - ↑ Current OST (OR 1.98)
  - ↑ History of incarceration (OR 1.76)
  - ↑ Attending a GP (OR 1.89)
  - ↑ Attending a drug and alcohol counsellor (OR 1.71)
  - ↓ Crystal methamphetamine drug of choice (OR 0.45)

- Adjusted associations
  - ↑ History of incarceration (OR 1.58)
  - ↑ Attending a GP (OR 1.59)
  - ↓ Crystal methamphetamine drug of choice (OR 0.54)

Treatment uptake

- 68% of those who were RNA positive

- Unadjusted associations
  - ↑ Current OST (OR 2.12)
  - ↑ Attending a GP (OR 2.15)
  - ↑ Attending a drug and alcohol counsellor (OR 1.99)
  - ↓ Injecting daily or more frequently (OR 0.53)
  - ↓ Receptive and/or distributive needle sharing (OR 0.32)

- Adjusted associations
  - ↑ Attending a GP (OR 1.96)
  - ↓ Injecting daily or more frequently (OR 0.54)
  - ↓ Receptive and/or distributive needle sharing (OR 0.33)

Testing for reinfection

- Small sample, so unable to investigate factors associated with retesting

- 98% of sample of those who commenced treatment completed, and 61% had tested for reinfection

Not testing or treating clusters with other risk factors

- People who did not receive treatment more likely to:
  - Inject daily or more often in the last month
  - Report receptive or distributive needle sharing

- Methamphetamine drug of choice - half as likely to receive RNA testing
  - **Significant in both unadjusted and adjusted analysis**

Mental health and homelessness not associated

- Neither self-reported mental health nor K10 score were associated with testing or treatment engagement
- Attendance at a mental health professional not associated
- Homelessness not associated with testing or treatment

Service engagement associated with testing and treatment engagement

- Of those who have already received antibody testing, engagement with a GP increases likelihood of RNA testing and treatment;
- RNA testing and treatment also associated with attendance to drug and alcohol counselling, as well as OST;
- History of incarceration also associated with antibody and RNA testing.

Need to build on strong anti-HCV testing

- Anti-body testing common
- RNA testing less so – missed opportunity
- Improving RNA testing will result in flow

DRUG TRENDS

Increasing GP testing and treatment could grow HCV workforce

- Increasing GP access for PWID, and increasing GP participation in HCV care will substantially grow the HCV workforce;
- Improving ease of testing and prompt return of results could improve flow through cascade of care;
- Particularly targeting those not reached by other treatments or services, e.g. people who use methamphetamine.

Simplifying testing and access needed

- Dried blood spot testing and rapid point-of-care testing
- Testing at services that are already being accessed

DRUG TRENDS

Thank you

E: daisy.gibbs@unsw.edu.au